



Egyptian Herbal Monograph

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## Volume 3

## Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

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**Ginkgo, Vitamin C, Vitamin B3, Vitamin B12, Beta carotene, Vitamin E, Selenium, Zinc**

**چنكو / فيتامين سي / فيتامين ب3 / فيتامين ب12 / بيتا كاروتين / فيتامين هـ / سيلينيوم / زنك**

### 1. Names & Synonyms

***Ginkgo biloba* L. (1)**

**Family:** Ginkgoaceae.

**Syns.** *Pterophyllus salisburiensis* Nelson, *Salisburia adiantifolia* Smith,

*S. macrophylla* C. Koch

**Arabic:** چنكو Ginkgo

**English:** Ginkgo leaf (2), Fossil tree; Kew tree; Maidenhair tree (3).

### 2. Parts used for medicinal purpose

**Ginkgo:** Dried leaf (1, 3-5).

### 3. Major chemical constituents

**Ginkgo**

- **Flavonoids:** Flavonols (quercetin, kaempferol, isorhamnetin, and their glycosides and coumaroyl esters) (6), proanthocyanidins (yield delphinidin and cyanidin as main building blocks after acid hydrolysis) (7, 8).

- **Terpene lactones:** Bilobalide, ginkgolides A, B, C, J, M (6).



- **Amino acids:** 6-Hydroxykynurenic acid (2-carboxy-4-one-6-hydroxyquinoline), a metabolite of tryptophan (9).
- **Others:** Benzoic acid, ginkgolic acid, 2-hexenal, polyprenols (e.g. di-trans-polycis-octadecaprenol) and acidic polysaccharide (10).

#### 4. Medicinal uses (Indications)

- A) Maintenance of good ocular and neural health in diabetic retinopathy
- B) Improvement of age-associated cognitive impairment and quality of life in mild dementia.
- C) Helps fight and protect neuro and ocular cells against the oxidative stress (Neuroprotection).

#### 5. Herbal preparations correlated to medicinal use

Combination of ginkgo powder extract (extraction solvent: alcohol & water), vitamin C, nicotinamide, vitamin B12, beta carotene 30%, vitamin E, selenium yeast and zinc.

**Herbal preparation is in pharmaceutical dosage forms. The pharmaceutical form should be described by the pharmacopoeia full standard term.**

#### 6. Posology and method of administration correlated to medicinal use

##### Adults and elderly

Combination of 40 mg Ginkgo extract, 66 mg vitamin C, 10.5 mg nicotinamide, 0.0024 mg cyanocobalamin, 11 mg beta carotene 30%, 10 IU vitamin E, 10 mcg selenium yeast and 1.9 mg zinc, daily in the morning.

**Method of administration:** Oral use.

#### 7. Contraindications

- Hypersensitivity to any of the active substance(s) and to other plants of the same family.
- Patients with known risk factors for intracranial hemorrhage and epilepsy (2,4).



## 8. Special warnings and precautions for use

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- The use in children and adolescents under 18 years of age has not been established (2,7,11).
- Preparations containing Ginkgo might increase susceptibility to bleeding, the medicinal product should be discontinued as a precaution 3 to 4 days prior to surgery (12).
- In patients with a pathologically increased bleeding tendency (hemorrhages) concomitant anticoagulant treatment, the medicinal product should only be used after consultation with a doctor (2,7, 11).
- Orlistat may decrease GI absorption of fat-soluble vitamins, allow at least 2 hours to elapse (before or after) (13).
- Adequate monitoring is advised when starting, changing the dose, when ending intake or if changing product (4).

## 9. Interactions with other medicinal products and other forms of interaction

- Concomitant use of Ginkgo biloba containing products and efavirenz is not recommended (4).
- Anticoagulants, (e.g. Phenprocoumon and Warfarin) or antiplatelet drugs (e.g. clopidogrel, acetylsalicylic acid and other non-steroidal anti-inflammatory drugs): Because of the increased risk of bleeding, ginkgo should not be taken concurrently with these products (4).
- Anticonvulsants: Ginkgo components may decrease the anticonvulsant effect; concurrent use should be avoided (4).
- Buspirone, fluoxetine: Ginkgo given with these agents may cause hypomania (2).
- Cytochrome P450IA2/P4502D6/P4503A4 substrates: Ginkgo may affect drugs metabolized by these agents (2).
- Selective serotonin reuptake inhibitors (SSRIs): Ginkgo is often used to reverse the sexual side effects of SSRIs (2).
- Trazadone: Ginkgo with trazadone may cause coma (2).



- Anticoagulant/antiplatelet herbs: Ginkgo may increase the risk of bleeding when used with these herbs (2).
- St. John's wort: Ginkgo with St. John's wort can lead to hypomania (2).

**Lab Test (2):**

- Partial thromboplastin time, ASA tolerance test: Ginkgo may cause increased bleeding.
- Platelet activity: Ginkgo may decrease platelet activity.
- Prothrombin time, blood salicylate: Ginkgo may increase prothrombin time and blood salicylate.

## 10. Fertility, pregnancy and lactation

- The use is avoided in pregnancy and lactation (7).
- No fertility data available.

## 11. Effects on ability to drive and use machines

No studies on the effect on the ability to drive and use machines have been performed.

## 12. Undesirable effects (4)

- Bleeding of individual organs has been reported (eye, nose, cerebral and gastrointestinal haemorrhage).
- Headache and dizziness.
- Mild gastrointestinal complaints: diarrhoea, abdominal pain, nausea and vomiting.
- Hypersensitivity reactions (allergic shock) may occur, skin, subcutaneous tissue disorders and allergic skin reactions (erythema, oedema, itching, rash) may also occur.
- People sensitive to nicotinic acid may experience flushing of the skin that is generally mild and transient (14).
- If adverse reactions occur, a doctor or a pharmacist should be consulted

## 13. Overdose

No case of overdose has been reported.



**14. Relevant biological properties**

Not required as per Egyptian guidelines for registration of herbal medicines.

**15. Additional information**

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**16. Date of compilation/last revision**

21/05/2026.



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